Decision Record

EA Number: OR-054-02-058
Title of Action: North Fork Crooked River Headcut (Lookout Pasture)
Serial Case File or Project Number: 73-5180
Tracking Number: H5CF
BLM Office: Prineville District

Decision:
It is my decision to implement the proposed action which will reduce streambank erosion and reestablish, in a controlled manner, approximately 75 feet of the old stream channel of the North Fork Crooked River. The river is breaching the berm of an old stock pond that had been constructed across the stream channel and is constricting the channel. The current channel dimensions (width, depth, meander radius of curvature) of the stream segment cutting through the breached berm are out of balance for the stream type. The purpose is to increase the radius of curvature of the stream channel meander bend, increase the width, and establish a small floodplain and point-bar within the channel bottom. This will increase energy dissipation and provide for movement of water and sediment through the old channel without excessive erosion. In addition, the constructed spillway channel, located parallel to the old channel, will be filled in using soil and rock used in the construction of the spillway.

The proposed action will increase the meander bend radius of curvature of one meander bend, remove the constriction at the berm, and construct a small floodplain where the stream is breaching the berm. This will require excavating approximately $50ft^3$ of stream channel bank and building a point bar on the inside of the new meander bend. The old, constructed spillway channel will be filled in to reduce the possibility of the spillway channel recapturing the stream channel during future high flow events. Approximately $200ft^3$ of soil and rock will be excavated from the old spillway berm that currently runs parallel, and adjacent to, the spillway and stream channel. In total, approximately $250ft^3$ ($10yd^3$) of material will be excavated on site.

Alternatives Considered:
The no action alternative would not reestablish the correct channel dimensions through the breached berm. Ponding of water upstream of the constricted breach-point would continue during bankfull flows and higher flow events. Erosion of the channel banks at the breach-point would continue, with the possibility of an instantaneous break in the breach.

Rationale for Decision:
Implementation of the proposed action will remove the constriction through the breach, promoting narrowing of the pools above and below the berm, and allow for establishment of riparian vegetation on the channel margins. Movement of the channel in this segment to one in equilibrium with it's stream type would allow for quicker recovery of the associated wet meadow. Completion of this project will remove the threat of potential habitat degradation resulting from capture of the old spillway by the channel, or erosion of the channel banks at the constricted berm. Fish habitat will improve in the long term for this section of the channel.

Management direction for riparian and aquatic habitat in the Brothers/La Pine Resource Management Plan (1989) require measures to protect or restore natural functions within riparian areas (pg 98). The

Standards for Rangeland Health (1997) require that riparian areas to be in properly functioning physical condition. This means that hydrologic, vegetative, and erosional/depositional processes interact to support stream and riparian area physical function.

Two phone calls were received in response to the EA, and one letter was received as a follow up to one of the phone calls. One phone call requested clarification of the project proposal. The second phone call and follow-up letter pointed out that information on cultural resources was missing in the EA document. Cultural resource information was inadvertently left out, and should have been discussed in the document. As a consequence, information regarding cultural resources follows:

An intensive cultural resource inventory of the project area was conducted on 5/18/02, which was less than one acre in size. The project area had been previously disturbed by heavy equipment sometime in the distant past. No cultural resources were observed. This was not considered unusual due to the very shallow, rocky soils, and information available regarding more sensitive areas with cultural sites both north and south of the project area. The inventory also considered possible access routes, mainly along an existing bladed way into the project area from the south. No cultural resources were discovered in the area observed. It was recommendation that the proposed project be allowed to proceed without further mitigative measures. However, if ground-disturbing activities were planned for the access route, then further assessment would be necessary.

A summary of the comments and the response to these comments are available for review in the project file located at the Prineville District Office.

Compliance and Monitoring:
Following implementation of the proposed action, the stream channel dimensions will be monitored on an annual basis for the first five years by the hydrologist to determine if the project was effective at returning the channel to a more stable configuration.

Terms / Conditions / Stipulations:
None.

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Dan Tippy Date
Acting Field Manager, Central Oregon Resource Area